MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2018/2019

DII5014 – INTRODUCTION TO INVESTMENT

(All sections / Groups)

29 MAY 2019
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **9** pages with 2 sections.
2. Answer **ALL** questions.
3. Answers for Section A should be shaded on the OMR form provided.
4. For Section B, write your answers in the answer booklet provided.
5. The formulae are given in the appendix.

SECTION A: MULTIPLE CHOICE QUESTIONS [30 Marks]
Each question carries 1 mark.

1. The reward that an investor can gain by owning an investment is _____ and _____.

   A. income from investment; increase in value of investment
   B. equity claim from investment; debt reimbursement from investment
   C. cash cycle from investment; direct cash from investment
   D. financial derivatives from investment; financial liquidity from investment

2. If Yin Yin wants to invest in an indirect investment category, which of the ways will be **BEST** for her?

   A. She can buy unit trust from a mutual fund company.
   B. She can buy a house.
   C. She can buy stock from the FBMKLCI.
   D. She can buy a land to build a shop.

3. _____ is a place where suppliers of funds and demanders of funds trade their financial assets.

   A. Financial institutions
   B. Financial markets
   C. Financial funds
   D. Financial corporation.

4. In a normal situation a company will issue _____ which is a debt instrument to borrow money.

   A. bonds
   B. options
   C. futures
   D. derivatives

5. Kabbilan plans to buy a house for his parents as an appreciation gift. So, Kabbilan can be categorised as what type of investor?

   A. Institutional investor.
   B. Individual investor.
   C. Trading investor.
   D. Risk taker investor.

Continued...

6. Brendon who is a young investor is planning to invest in a market where it has high potential growth with high potential risk. Based on the life cycle of investing, Brendon is in the _____.

   A. middle-aged consolidation stage
   B. growth-oriented youth stage
   C. retirement stage
   D. income oriented stage

7. Which of the following investments is the **MOST** suitable for Ms Tan Khai Chee, if she is in the middle-age investment life cycle?

   A. She can invest in options.
   B. She can invest in low-risk growth and income stocks.
   C. She can invest in mutual funds.
   D. She can invest in bank certificates of deposit.

8. The ease with which an investment can be converted to cash without a substantial loss in ringgit value is called the _____.

   A. asset value
   B. ease of liquidity
   C. immediate transformation
   D. variable cost factor

9. A/An _____ is a professional career where, individuals need to acquire the Certified Financial planner certification.

   A. commercial banker executive
   B. financial planner
   C. investment executive
   D. finance officer

10. Which of the below is the advantages if an investor invests in a short-term investment?

    A. Investors will receive low levels of return.
    B. If there are inflation investors will lose potential purchasing power.
    C. It provides high liquidity and a low risk of default.
    D. Investors will have to bare the taxes.

11. A time period after prospectus is filed where the company must restrict what is said about the company is called as the _____.

    A. roadshow
    B. quiet period
    C. red herring
    D. prospectus

Continued...

12. Which of the below is **NOT** a duty of an underwriter?

A. To promote the company's stock.
B. To facilitate sales for the company.
C. To assist the filing of registration statement to Securities Commission.
D. To disclose the information to potential investors.

13. _____ is the highest price offered by marker maker to purchase a given security, where else, _____ is the lowest price at which a market maker is willing to sell a given security.

A. Bid; ask
B. Ask; bid
C. Margin; ask
D. Bid; margin

14. If Seng Hup wants to earn positive income from his investment, he should choose a _____. This is because it is the most favourable market.

A. bear market
B. primary market
C. bull market
D. secondary market

15. Pei Hwa expects the price of the stock to decrease next month. Which one of the following strategies would allow her to earn profit?

A. Take a long position in the stock after one month.
B. Buy the stock on margin today.
C. Sell the stock short today.
D. Sell the stock long today.

16. Ms. Aisyah had just started as an investor. She buys 100 shares of Abu Berhad at RM 8.00 per share, with a margin of 55%. If Abu Berhad's share price falls to RM 5.00 per share, what will be the new margin position?

A. 28.00%
B. 56.00%
C. 60.00%
D. 80.00%

17. _____ will only occur when there is an insufficient amount of maintenance margin exists.

A. Maintenance margin
B. Equity margin
C. Margin call
D. Securities exchange

Continued...

18. On August 2018, Umanath purchased 200 shares of ABC stock at a price of RM15 a share. He utilised his 60% margin account to make the purchase. What is Umanath's initial equity in this investment?

A. RM1,200
B. RM1,800
C. RM3,600
D. RM5,300

19. Ah Kow purchases 500 units of share at RM3.80 on a 70% margin. Assuming that he is holding the shares for one year and his interest charges will be RM50 over the period. He also received dividends amounting to RM1.20 per share. How much will be his percentage return on invested capital if he sells the shares for RM5.50?

A. 55.00%
B. 105.26%
C. 250.00%
D. 340.60%

20. Johnathan wants to invest in China, which of the below will **NOT** be the potential risk he will face?

A. Different laws in trading.
B. Value of foreign investments will rise.
C. Different economic conditions.
D. Same political conditions.

21. The sum of the income and the capital gain (or loss) earned on an investment over a specified period of time is referring to the _____ of an investor.

A. total return
B. total loss
C. total investment
D. total liquidity

22. Alif is considering to invest either in MMU's share or MBU's share. He was adviced to examine the return of both stocks before he makes his decision. Which of the following **NOT** the best method in assisting Alif decision making?

A. Alif can seek advice from a friend working in the company.
B. Alif can gain information from competitors of the company.
C. Alif can employ a financial planner to gain advice.
D. Alif should follow the suggestions from a friend he trust without any doubt.

Continued...

23. Which of the below is in the category of internal characteristic of an investment return?

A. Inflation rate of the country.
B. Political stability.
C. Risk of investment.
D. Economic environment.

24. The sooner your money can begin _____ the faster it will _____.

A. earning interest; grow
B. gaining losses; grow
C. earning new stocks; decline
D. receiving value added; depreciate

25. The required return on a stock is 20%. The risk-free rate of return is 5% and the real rate of return is 3.5%. What will be the risk premium for the investment?

A. 5%
B. 11.5%
C. 15%
D. 16.5%

26. Which of the below is **NOT** one of the advantages of holding period return?

A. Easy to understand when making investment decisions.
B. Does not consider time value of money.
C. Easy to calculate when making investment decisions.
D. Consider the income and growth.

27. The relationship between risk and return, in which investments with more risk should provide higher returns and vice versa is called _____.

A. rate of return
B. risk of return
C. risk-return tradeoff
D. business risk

28. Shalini Corporation has invested RM100,000 but is uncertain regarding the interest payment that derive from the company's liabilities. This situation is referring to which of the below sources of risk?

A. Financial risk.
B. Liquidity risk.
C. Market risk.
D. Tax risk.

Continued...

29. Ah Meow plans to invest in PUBG Sdn Bhd. He requires a greater return in exchange for greater risk. What type of investor is Ah Meow?

A. Risk-indifferent.
B. Risk-diverse.
C. Risk-averse.
D. Risk-seeking.

30. By using statistic to measure the dispersion of returns around an asset's average or expected return, an investor can use _____.

A. risk-free rate
B. present value
C. standard deviation
D. yield to maturity

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SECTION B: STRUCTURED QUESTIONS [70 Marks]

QUESTION 1

	Expected Return (%)	
Year	Mutual fund	Common stock
2016	5	15
2017	12	22
2018	10	13

Based on the above table calculate:

a. the expected portfolio return for each of the given year, where mutual fund will represent 60% and common stock is 40% of the portfolio.

(9 marks)

b. the average expected portfolio return over the period.

(3 marks)

c. the standard division of the expected portfolio return.

(5.5 marks)

(Total: 17.5 marks)

QUESTION 2

a. Jayanadren Corporation's management has decided to reduce their company's share price to make it more attractive to the public by declaring an 8-for-2 stock split. The stock is currently selling at RM25 a share in the market. If Xin Yin currently own 800 shares, calculate:

i. the new number of shares outstanding.

(2.5 marks)

ii. the new price per share after stock split.

(2.5 marks)

b. The GP corporation earned a net profit after taxes of RM5 million and decided to pay out RM550,000 in dividends to preferred stockholders. Calculate the EPS of the company if the common stock outstanding is 350,000 shares.

(2.5 marks)

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c. The information had collected by Jing Tian:

Total Asset	RM100,000
Fixed Asset	RM60,000
Inventory	RM20,000
Account receivable	RM10,000
Annual sales	RM50,000
Current liabilities	RM10,000
Total Liabilities	RM40,000
Equity	RM60,000

You are required to calculate the following ratios for Jing Tian.

i. Current Ratio.
(2 marks)

ii. Net Working Capital.
(2 marks)

iii. Account Receivable Turnover.
(2 marks)

iv. Inventory Turnover.
(2 marks)

v. Total Asset Turnover.
(2 marks)

(Total: 17.5 marks)

QUESTION 3

a. Define the following risk:

i. Interest rate risk.
(2 marks)

ii. Purchasing power risk.
(2 marks)

iii. Liquidity risk.
(2 marks)

b. Ben Corporation bond has an 8.8 percent coupon rate and is currently sell at RM700. The bond has 8 years remaining to maturity. However, the bond can be called in 2 years at a call price of RM600.

i. Yield-to-maturity
(4.5 marks)

ii. Yield-to-call
(4.5 marks)

iii. Current yield
(2.5 marks)

(Total: 17.5 marks)

Continued...

QUESTION 4

a. Sebastian had collected the following fund information:

	China Equity Fund	Japan Balance Fund
Total asset	RM10 million	RM20 million
Total liabilities	RM300,000	RM500,000
Total unit outstanding	11 million	12 million

Based on this information:

i. Calculate the NAV per unit for both fund.

(5 marks)

ii. Compute how much units Sebastian will have, if he wants to invest RM5,000 in China Equity Fund and RM10,000 in Japan Balance Fund.

(3 marks)

iii. Compute how much Sebastian should invest, if he wants to invest 500 units of China Equity Fund and 1,000 units of Japan Balance Fund.

(3 marks)

iv. After a year, Sebastion would like to go holidays and it would cost him RM3,000. If the China Equity Fund NAV is RM1.20 and he is holding 1,500 units of this fund, would he has enough money to enjoy his holidays?

(2.5 marks)

b. List any **Four (4)** types of Bond Funds.

(4 marks)

(Total: 17.5 marks)

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Appendix

1. $\text{Margin} = \frac{V-D}{V}$

2. Return on invested capital from a margin transaction

$$= \frac{\text{Total current income received} - \text{Total interest paid on margin loan} + \text{Capital gain/loss}}{\text{Amount of equity at purchase}}$$

3. Risk-free rate = Real rate of return + Expected inflation premium

4. Required return on investment j = Risk-free rate + Risk premium for investment j

5. $\text{HPR} = \frac{\text{Income during period} + \text{Capital gain/loss during period}}{\text{Beginning investment value}}$

6. $FV = PV\,(1 + r)^n$

7. $D_1 = D_0\,(1 + g)^n$

8. $\text{Standard Deviation} = \sqrt{\frac{\sum_{t=1}^{n}(ri - \bar{r})^2}{n-1}}$

9. $\text{Portfolio return} = \sum_{j=1}^{n}(w_j \times r_j)$

10. $r_j = R_F + [\, b_j \times (r_m - R_F)\,]$

11. $\text{Portfolio beta} = \sum_{j=1}^{n}(w_j \times b_j)$

12. $\text{EPS} = \frac{\text{Net Income} - \text{Preferred dividends}}{\text{Number of shares of common stock outstanding}}$

13. $\text{Dividend yield} = \frac{\text{Anual dividends received per share}}{\text{Current market price of the stock}}$

14. $\text{Dividend payout ratio} = \frac{\text{Dividends per share}}{\text{Earnings per share}}$

15. Total returns

= Current income + Capital gains/losses ± Changes in currency exchange rates

16. $\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$

17. Net working capital = Current assets – Current liabilities

18. Accounts receivable turnover = $\frac{\text{Annual sales}}{\text{Accounts receivable}}$

19. Inventory turnover = $\frac{\text{Annual sales}}{\text{Inventory}}$

20. Total asset turnover = $\frac{\text{Annual sales}}{\text{Total assets}}$

21. Debt-equity ratio = $\frac{\text{Long-term debt}}{\text{Stockholders' equity}}$

22. Time interest earned = $\frac{\text{EBIT}}{\text{Interest expenses}}$

23. Net profit margin = $\frac{\text{Net profit after taxes}}{\text{Total revenue}}$

24. ROA = $\frac{\text{Net profit after taxes}}{\text{Total assets}}$

25. ROE = $\frac{\text{Net profit after taxes}}{\text{Stockholders' equity}}$

26. P/E = $\frac{\text{Net price of common stock}}{\text{EPS}}$

27. PEG ratio = $\frac{\text{Stock's P/E ratio}}{\text{3-to-5 year growth rate in earnings}}$

28. Dividend per share = $\frac{\text{Annual dividend paid to common stock}}{\text{Number of common shares outstanding}}$

29. Payout ratio = $\frac{\text{Dividends per share}}{\text{Earnings per share}}$

30. Book value per share = $\frac{\text{Common stockholders' equity}}{\text{Number of common shares outstanding}}$

31. Price-to-book-value = $\frac{\text{Market price of common stock}}{\text{Book value per share}}$

32. Taxable equivalent yield = $\frac{\text{Yield on municipal bond}}{\text{1-Federal tax rate}}$

33. Taxable equivalent yield for both federal and state taxes

$$= \frac{\text{Municipal bond yield}}{1-[\text{Federal tax rate} + \text{state tax rate}\ (1 - \text{Federal tax rate})]}$$

34. Conversion value = Conversion ratio x Current market price of the stock

35. $\text{Conversion equivalent} = \frac{\text{Current market price of the convertible bond}}{\text{Conversion ratio}}$

36. Conversion premium (in RM)

= Current market price of the convertible bond – Conversion value

37. $\text{Conversion premium (in \%)} = \frac{\text{Conversion premium (in RM)}}{\text{Conversion value}}$

38. Payback period =

$$\frac{\text{Conversion premium (in RM)}}{\text{Annual interest income from the convertible bond} - \text{Annual dividend income from the underlying common stock}}$$

39. $\text{Current yield} = \frac{\text{Annual interest income}}{\text{Current market price of the bond}}$

40. $\text{Yield to maturity} = \frac{\text{Annual interest} + \frac{\text{Par value} - \text{Market price}}{\text{Number of years to maturity}}}{\frac{\text{Par value} + \text{market price}}{2}}$

41. $\text{Yield to call} = \frac{\text{Annual interest} + \frac{\text{Call price} - \text{Market price}}{\text{Number of years to call}}}{\frac{\text{Call price} + \text{market price}}{2}}$

42. $\text{Premium (or discount)} = \frac{\text{Share price} - \text{NAV}}{\text{NAV}}$

43. HPR =

$$\frac{(\text{Number of shares at end of period x Ending price}) - (\text{Number of shares at beginning of period x Initial price})}{\text{Number of shares at beginning of period x Initial price}}$$

44. $\text{NAV} = \frac{\text{Fund assets} - \text{Fund liabilities}}{\text{Number of units outstanding}}$